AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Cancelled)

2. (Cancelled)

3. (Currently Amended) The method of claim **[[1]]** **19**, wherein said sinterable particulate material or materials are selected from the class of metals, ceramics and mixtures of metals and ceramics.

4. (Cancelled)

5. (Currently Amended) The method of claim **[[1]]** **19**, wherein said degradable organic thermoplastic material or materials are selected from the class of polyolefins, waxes, plasticizers, greases, oils, surfactants and mixtures of these.

6. (Currently Amended) The method of claim **[[1]]** **19**, wherein the tools include semiconductor wire bonding capillaries or blanks for semiconductor wire bonding capillaries.

7. (Cancelled)

8. (Canceled)

9. (Canceled)

10. (Cancelled)

11. (Currently Amended) The method of claim **[[1]]** **25**, wherein the said tools include semiconductor wire bonding wedges or blanks for the semiconductor wire bonding wedges.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Currently Amended) A method for producing tools or blanks for tools of reduced dimensions for use in the assembly and interconnection of semiconductor chips, comprising:

a. providing at least one sinterable material in fine particulate form and at least one degradable organic thermoplastic material,

b. mixing an accurately determined volume of said sinterable particulate material or materials with an accurately determined volume of said thermoplastic material or materials to form a thermoplastic compound,

c. forming said thermoplastic compound into green semiconductor wire bonding tools or blanks for semiconductor wire bonding tools, and

d. extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions;

wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions results in dense end products comprising tools for semiconductor wire bonding that respectively include at least one borehole having final dimensions such that bonding wire for bonding semiconductor wires may pass during bonding, **and wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free performs into dense end products of reduced dimensions includes obtaining** ~~**wherein**~~ the final dimensions of the at least one borehole ~~**are obtained**~~ during sintering.

20. (Previously Presented) The method of claim 19, wherein the tools for semiconductor wire bonding include semiconductor wire bonding capillaries that respectively include at least one borehole having final dimensions such that bonding wire for bonding semiconductor wires may pass during bonding, wherein the final dimensions of the at least one borehole are obtained during sintering.

21. (New) The method of claim 19, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions results in dense end products comprising tools for semiconductor wire bonding that respectively include at least one borehole having final dimensions including a final diameter such that bonding wire for bonding semiconductor wires may pass during bonding, and wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free performs into dense end products of reduced dimensions includes obtaining the final dimensions including the final diameter of the at least one borehole during sintering.

22. (New) The method of claim 21, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free performs into dense end products of reduced dimensions includes obtaining a final diameter of about 10 micrometers for the at least one borehole during sintering.

23. (New) The method of claim 21, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free performs into dense end products of reduced dimensions includes obtaining a final diameter of about 13 micrometers for the at least one borehole during sintering.

24. (New) The method of claim 21, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free performs into dense end products of reduced dimensions includes obtaining a final diameter of about 8 micrometers for the at least one borehole during sintering.

25. (New) A method for producing tools or blanks for tools of reduced dimensions for use in the assembly and interconnection of semiconductor chips, comprising:

a. providing at least one sinterable material in fine particulate form and at least one degradable organic thermoplastic material,

b. mixing an accurately determined volume of said sinterable particulate material or materials with an accurately determined volume of said thermoplastic material or materials to form a thermoplastic compound,

c. forming said thermoplastic compound into green semiconductor wire bonding tools or blanks for semiconductor wire bonding tools, and

d. extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions;

wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free preforms into dense end products of reduced dimensions results in dense end products comprising tools for semiconductor wire bonding that respectively include at least one borehole having a final diameter such that bonding wire for bonding semiconductor wires may pass during bonding, and wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free performs into dense end products of reduced dimensions includes obtaining the final diameter of the at least one borehole during sintering.

26. (New) The method of claim 25, wherein the tools for semiconductor wire bonding include semiconductor wire bonding capillaries that respectively include at least one borehole having a final diameter such that bonding wire for bonding semiconductor wires may pass during bonding, wherein the final diameter of the at least one borehole are obtained during sintering.

27. (New) The method of claim 25, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free performs into dense end products of reduced dimensions includes obtaining a final diameter of about 10 micrometers for the at least one borehole during sintering.

28. (New) The method of claim 25, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free performs into dense end products of reduced dimensions includes obtaining a final diameter of about 13 micrometers for the at least one borehole during sintering.

29. (New) The method of claim 25, wherein the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free performs into dense end products of reduced dimensions includes

obtaining a final diameter of about 8 micrometers for the at least one borehole during sintering.